SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELI	VERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.  Print your name and address on the reverse so that we can return the card to you.  Attach this card to the back of the mailpiece, or on the front if space permits.  1. Article Addressed to:  MR. Jasoni N. Hack  Alliance Coal, LLC	B. Received by ( Printed Name)  D. Is delivery address different from Item If YES, enter delivery address below	
771 Corporate Drive Suite 1000 Lexingtoni, Kentucky 40503	3. Service Type  Greatified Mail	il sipt for Merchandis
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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960
DEC 9 6 2011

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jason N. Heck Alliance Coal LLC 771 Corporate Drive Suite 1000 Lexington, Kentucky 40503

Subject: Modification to UIC Permit No.KYV0051

Effective:

Permit Writer: Ford

Dear Mr. Webb:

Enclosed is the Underground Injection Control permit modification referenced above. Please replace the appropriate permit page(s) with the enclosed page(s). This action constitutes the U. S. Environmental Protection Agency's final permit decision in accordance with 40 C.F.R. §124.15(a).

Under 40 C.F.R. §124.19, any person who filed comments on the draft permit or participated in the public hearing may contest this decision by petitioning the Administrator to review any condition of the permit decision. In this case, since no public hearing was held and no comments were filed during the public notice period, no appeal may be taken regarding this decision. Pursuant to 40 C.F.R. §124.15(b), this permit will be effective as specified in the permit.

Information on legal matters may be obtained by contacting Ms. Wilda Cobb, Office of Environmental Accountability at (404) 562-9307.

Sincerely

James D. Giattina

Director

Water Protection Division

Enclosure

Flow Rate (1,000 gallons/day) of Injected Fluid

Weekly

Cumulative Volume (1,000 gallons) of Injected Fluid

Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which each well commences operation. Recordings shall be of representative values.

#### 3. <u>Injection Fluid Analysis</u>

The permittee shall conduct an injection fluid analysis prior to injection and annually thereafter. An analysis will also be required whenever changes are made to the injection fluid. The analysis must include:

- (a) pH, specific gravity, total dissolved solids, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, selenium, and thallium.
- (b) A list of all chemicals and their composition used for new flocculation. These lists should indicate the brand name of the product and manufacturer.

#### 4. Other Tests

- (a) The permittee shall conduct additional analysis from fluid samples collected at five (5) monitoring stations, identified on EPA CLASS V SLURRY INJECTION PERMIT MAP and amended SLOUGHS WILDLIFE MANAGEMENT AREA JENNY HOLE as SIMW#1. SIMW#2, SIMW 6, SIMW 7, and SIMW 8. The first sample shall be three months after the effective date of this permit and every three months thereafter. These wells shall be analyzed for the same parameters as in Part 1, Section D, 3, (a) of this permit.
- (b) The permittee shall conduct additional analysis from fluid samples collected at seven (7) of the fifteen (15) water supply wells identified in the permit application as active water wells. The water wells selected for sampling should be representative of the area of review. The water wells shall be sampled for pH, acidity, alkalinity, specific conductivity, sulfate, and specific gravity.

## 5. <u>Shutting Down Injection Operation</u>

Permittee shall cease injection if any of the wells in Part I. Section D, 4. (a) or (b) exceed baseline levels. After shutting down injection operations, permittee will conduct a dye trace study to ascertain if the coal injection operations are impacting drinking water



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960
SEP 2 6 2011

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Jason N. Heck Environmental Coordinator River View Coal, LLC 771 Corporate Drive Suite 1000 Lexington, Kentucky 40503

Subject: Draft Modification of UIC Permit No. KYV0051

Permit Writer: Ford

Dear Mr. Heck:

The U.S. Environmental Protection Agency, Region 4, intends to modify the above referenced Underground Injection Control (UIC) permit for your facility in accordance with the Safe Drinking Water Act. The enclosed public notice, draft modified pages, and statement of basis show the proposed changes to be made and the rationale for the changes.

If you wish to comment on the draft modification, please submit the comments so that they are received in this office within twenty-five (25) days after receipt of this letter in order for us to accommodate any necessary revisions before the end of the public comment period or before the public hearing, if one is scheduled. If you have any questions concerning the proposed modification or the procedures associated with the permit program, please contact George Ford at the above address or by calling (404) 562-9307.

Sincerely,

Fred McManus

Chief

Ground Water & SDWA Enforcement Section

Enclosures

#### PUBLIC NOTICE

## U.S. Environmental Protection Agency

Region 4

Water Protection Division - Safe Drinking Water Branch

61 Forsyth Street, SW

Atlanta, Georgia 30303-8960

Public Notice No. KY11UIC029

October 18, 2011

# NOTICE OF PROPOSED ISSUANCE OF UNDERGROUND INJECTION CONTROL PERMIT MODIFICATION

The U.S. Environmental Protection Agency, Region 4, intends to modify a Underground Injection Control (UIC) permit under the authority of the Code of Federal Regulations at 40 C.F.R. Parts 124, 144, 146, and 147 to

River View Coal, LLC 771 Corporate Drive, Suite 800 Lexington, Kentucky 40503 UIC Permit Application Number KYV0051

This proposed Class V modification will authorize replacement monitoring wells SIMW #6, #7 and #8 for existing monitoring wells SIMW #3, #4 and #5. The replacement monitoring wells will be located stratigraphically in the same underground locations as the wells they will replace.

The proposed UIC permit was drafted in accordance with the provisions of the Safe Drinking Water Act, as amended (42 USC 300f et seq., commonly known as SDWA) and other lawful standards and regulations. The permit limitations and conditions are tentative and open to comment from the public. Persons wishing to comment upon or object to any aspects of the permit issuance are invited to submit same in writing within thirty (30) days of this notice to the U.S. Environmental Protection Agency, Water Protection Division, Safe Dinking Water Branch, Ground Water & SDWA Enforcement Section, 61 Forsyth Street, S.W., Atlanta, Georgia 30303-8960, ATTENTION: George Ford. The public notice number and the UIC permit application number should be included in the first page of comments. All comments received during the public notice period will be made a part of the administrative record of this permit and will be available for public review.

All comments received within the thirty-day period will be considered in the formulation of the final determination regarding the permit issuance. Any interested person may, within the thirty-day period, request a public hearing, as provided by 40 C.F.R. §124.12. Where there is a significant degree of public interest in the proposed permit issuance, the EPA Regional Administrator will hold a public hearing. Any request for a hearing must be in writing to the address given above and must state the nature of the issues proposed to be raised in the hearing.

After consideration of all timely written comments, the requirements and policies in the SDWA and appropriate regulations, and, if a hearing is held, after consideration of all comments, statements and data presented at the hearing, the EPA Regional Administrator or his designee will make final determinations regarding the permit issuance. If the final determinations are substantially unchanged from the tentative determinations outlined above, the EPA Regional Administrator or his designee will so notify all persons who submitted written comments or participated in the hearing, if any was held. If the final determinations are substantially changed, the EPA Regional Administrator or his designee will issue a public notice indicating the revised determinations.

Within thirty (30) days after the Regional Administrator serves notice of the above final permit decision, any person who filed comments or participated in the public hearing, if any, may petition the Environmental Appeals Board (EAB) to review the permit decision or any condition therein. Any person, who failed to file comments or failed to participate in the public hearing, if any, may petition for administrative review only to the extent of the changes from the draft to the final permit decision. Additional information regarding administrative review is available in 40 C.F.R. §124.19 or by contacting Wilda Cobb of the Office of Environmental Accountability at the above address or telephone number (404) 562-9530. Technical information regarding the permit review is available by contacting George Ford of the Ground Water and SDWA Enforcement Section at (404) 562-9307. A petition to the EAB under 40 CFR §124.19 is a prerequisite to the seeking of judicial review of the final permit decision.

The administrative record, including application, statement of basis, draft permit, comments received, and additional information on hearing procedures is available by writing to EPA at the above address, or for review and copying at 61 Forsyth Street, 9th Floor, Atlanta, Georgia, 30303-8960, between the hours of 8:15 a.m. and 4:30 p.m., Monday through Friday. Copies will be provided at a cost of 20 cents per page.

Please bring the foregoing to the attention of anyone who may be interested in this matter.

####

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION 4**

Statement of Basis

for

Modification to U.S. Environmental Protection Agency, Region 4 Underground Injection Control (UIC)

Permit Number KYV0051

10.98 11/5.

for

River View Coal, LLC 771 Corporate Drive, Suite 800 Lexington, Kentucky 40503

for

the construction, operation, and plugging and abandonment of six (6) Class V injection wells located in:

Kentucky #11 Coal Seam Ohio #11 Mine Union County, Kentucky

with the center of the project at

Latitude 37° 43' 43.3044" Longitude 87° 56' 56.1100"

On October 18, 2009, River View Coal, LLC (River View) was issued permit KYV0051 for the injection of coal slurry waste. The purpose of this injection is to place coal mining waste into mined out areas of Coal Seam #11 by use of slurries composed of mining waste (reject coal, rock, pyrite) and water. On June 14, 2011, the permittee notified EPA that it was going to plug and abandon monitoring wells SIMW #3, SIMW #4 and SIMW #5 which are associated with the above referenced permit. River View was informed by the EPA that it could not plug the referenced monitoring wells without first providing replacement monitoring wells. On July 6, 2011, River View submitted information on three replacement monitoring wells (SIMW #6, SIMW #7 and SIMW #8). The replacement wells are stratigraphically in the same positions as the original wells. The replacement monitoring wells locations are provided on amended Sloughs Wildlife Management Area, Jenny Hole – Highland Creek Unit map attachment.

Under the authority of 40 C.F.R. Parts 144 and 146, the EPA permits must specify conditions for construction, operation, monitoring, reporting, and plugging and abandonment of injection wells so as to

prevent the movement of fluids into any underground sources of drinking water (USDWs). General provisions for the EPA UIC permit requirements are found at 40 C.F.R. Parts 144 and 146, while regulations specific to Kentucky injection operations are found at 40 C.F.R. Part 147, Subpart S. In addition, permit conditions specific to these wells are as follows:

<u>Basis of Issuance</u>: EPA has made a determination to issue this injection permit modification after completing a technical review of the application. The technical evaluation included a review of the surface and stratigraphic locations of the replacement monitoring wells.

Additional Information: Questions, comments and requests for additional information or for a public hearing may be directed to the contact person listed below. The public comment period for this permitting action will close thirty (30) days after the date of the public notice. If the EPA receives written comments of substantial public interest concerning a hearing on this action, a public notice of this hearing will be published locally and mailed to interested parties.

Mr. George Ford U.S. EPA, Region 4 Water Protection Division Safe Drinking Water Branch Ground Water & SDWA Enf. Section 61 Forsyth Street, SW Atlanta, Georgia 30303-8960 (404) 562-9307 Flow Rate (1,000 gallons/day) of Injected Fluid

Weekly

Cumulative Volume (1,000 gallons) of Injected Fluid

Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which each well commences operation. Recordings shall be of representative values.

## 3. <u>Injection Fluid Analysis</u>

The permittee shall conduct an injection fluid analysis prior to injection and annually thereafter. An analysis will also be required whenever changes are made to the injection fluid. An analysis must include:

- (a) pH, specific gravity, total dissolved solids, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, selenium, and thallium.
- (b) A list of all chemicals and their composition used for new flocculation. These lists should indicate the brand name of the product and manufacturer.

#### 4. Other Tests

(a) The permittee shall conduct additional analysis from fluid samples collected at five (5) monitoring stations, identified on the EPA CLASS V SLURRY INJECTION PERMIT MAP and amended SLOUGHS WILDLIFE MANAGEMENT AREA JENNY HOLE—HIGHLAND CREEK UNIT as SIMW #1, SIMW #2, SIMW #6, SIMW #7, and SIMW #8. The first sample shall be three months after the effective date of this permit and every three months thereafter. These wells shall be analyzed for the same parameters as in Part 1, Section D, 3, (a) of this permit.

## 5. Shutting Down Injection Operation

Permittee shall cease injection if any of the wells in Part I, Section D, 4, (a) is over baseline levels. After shutting down injection operations, permittee will run a dye trace study to ascertain if the coal injection operations are impacting water aquifers or the fault systems. If the injection operations are impacting the faults or aquifers in the area, injection operations can not proceed until the impact of the injection operation on the faults or water aquifers is corrected. Baseline levels will be determined by an average from two analyses taken prior to injection.

#### SECTION E. REPORTING REQUIREMENTS

#### 1. Reports on Well Tests and Workovers

Within thirty (30) days after completion of the activity, the permittee shall report to the Director the results of any tests other than those specified in Part I, Section B, Items 2.

#### 2. Reporting of Monitoring Results

Monitoring results, as specified in Part I, Section D, Items 3 and 4, shall be reported every three (3) months and must be postmarked by the 15<sup>th</sup> day following each calendar quarter (January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup>). Monitoring results, as specified in Part I, Section D, Item 2, shall be reported on a yearly basis on EPA Form 7520-11 and must be postmarked by the 28<sup>th</sup> day of the effective anniversary date

Copies of the monitoring results and reports required by Part I, Section D, and all other reports required by Part II, shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency, Region 4 Director, Water Protection Division Safe Drinking Water Branch Ground Water & SDWA Enforcement Section 61 Forsyth Street, S.W. Atlanta, Georgia 30303-8960

#### 3. Reporting of New Wells Drilled Within the Area of Review (AOR)

Within ten (10) days after spud date, the permittee shall report to the Director by certified mail, return receipt requested, the construction plans for any new well within the AOR of the permitted facility that will penetrate the injection zone. The permittee shall provide information on proposed construction (including location and quantities of cement), location and depth. This requirement applies to any construction activity regardless of ownership of the well. If the construction of the new well will not protect USDWs from contamination, the Director may terminate the permit under 40 C.F.R. ' 144.40(a)(3), if he or she determines that continued injection may endanger human health or the environment.

#### SECTION F. PLUGGING AND ABANDONMENT PLAN

Plugging and abandonment (P&A) of the permitted injection well shall be in accordance with Part II, Section F of this permit and 40 C.F.R. 146.10.

During the operating life of the wells, the injection facility may be screened for technologically enhanced naturally occurring radioactive material (NORM) by the EPA or another party. If the permittee is notified by a party other than the EPA, or becomes aware at any time that elevated levels of NORM have been detected at the injection facility, the permittee must notify the EPA in writing of that fact no later than 45 days prior to the permittee's intent to P&A the well. The EPA may require the permittee to revise the P&A plan to insure the safe disposal and proper management of elevated levels of NORM waste.

Plugging and abandonment (P&A) of the permitted injection and vent wells will be by placing a continuous column of cement from 100 feet below the existing ground elevation to three feet below existing surface inside the injector casing. After cement hardening, the casing will be cut and removed three (3) feet below existing surface.

Plugging of the injection wells is estimated to cost \$ 2,300.00 per well and will require posting of a financial responsibility demonstration with the EPA prior to injection.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 2 5 2011

## <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Mr. Heath A. Lovell River View Coal, LLC 771 Corporate Drive Suite 1000 Lexington, Kentucky 40503

Re: Modification to UIC Permit No. KYV0051

Effective: MAY 2.5 2011

Permit Writer: George Ford

Dear Mr. Lovell:

Enclosed is the Underground Injection Control permit modification referenced above. Please replace the appropriate permit page(s) with the enclosed page(s). This action constitutes the U. S. Environmental Protection Agency's final permit decision in accordance with 40 C.F.R. §124.15(a).

Under 40 C.F.R. §124.19, any person who filed comments on the draft permit or participated in the public hearing may contest this decision by petitioning the Administrator to review any condition of the permit decision. In this case, since no public hearing was held and no comments were filed during the public notice period, no appeal may be taken regarding this decision. Pursuant to 40 C.F.R. §124.15(b), this permit will be effective as specified in the permit.

Information on legal matters may be obtained by contacting Wilda Cobb, Office of Environmental Accountability at (404) 562-9530.

Sincerely.

James D. Giattina

Director

Water Protection Division

Enclosure

#### PART I

#### WELL SPECIFIC CONDITIONS

#### SECTION A. AREA AND WELLS AUTHORIZED

#### 1. Area Within Which Underground Injections are Authorized

The permittee is authorized to construct, operate and plug and abandon six (6) Class V coal slurry injection wells at the Ohio #11 mine abandoned workings in Union County, Kentucky. This project area is delineated in the UIC Permit Application on project location map Sheet KY. No. 11 Old Works Map (Attachment A) and the Sloughs Wildlife Management Area, Jenny Hole – Highland Creek Unit Map with an approximate center at:

Latitude 37° 43' 43.3044" Longitude 87° 56' 52.1100"

## 2. Specific Wells Authorized for Construction and Operation

The following wells are specifically authorized by this permit for construction and operation within the permitted area:

Six (6) coal slurry injection wells which inject through the roof of the abandoned mine into an isolated abandoned area (works) of the Ohio #11 Mine Workings, KY. No. 11 Coal Seam.

#### SECTION B. CONSTRUCTION REQUIREMENTS

#### 1. <u>Injection</u> Well Construction

Injection wells will be constructed is in three stages. In the first stage, the permittee will drill a borehole large enough to accommodate a 13 \(^3/8\) inch casing. This casing will be landed at the base of the unconsolidated rock and cemented back to surface with a continuous column of cement. Once the cement on the 13 \(^3/8\) inch casing has hardened, the permittee will drill a borehole large enough to accommodate an 8 inch casing from the base of the unconsolidated rock to within 10 feet of the mine roof. The permittee will place the 8 inch casing into the borehole from total depth to surface and place a continuous column of cement from total depth to surface. Once the cement has hardened, the permittee will then extend the borehole through the roof of the mined out works.

The additional 5 (five) injection wells added by this permit modification will be constructed in the following manner:

A small diameter pilot hole will be extended from surface into the slurry area. A packer will be set approximately five (5) feet from the roof of the mine slurry area. A suitable sized drill bit will be used to ream out the pilot hole to within five (5) feet of the packer. Suitable casing will be run and landed at the bottom of the expanded borehole. The casing will be filled with Class A cement and a second packer will be used to push the cement down the casing and up the backside of the casing. After cement is observed on the backside of the casing at surface, the second packer will be removed. After the cement has hardened, the permittee will extend the borehole through the roof of the mine slurry area.

## 2. <u>Mechanical Integrity Testing</u>

Permittee will conduct and pass a Mechanical Integrity Test (MIT) prior to starting injection procedures. The test shall consist of the annulus being pressured to 220 psi and held for one hour. If the test has less than a + or -10 % loss in pressure, the well passes.

## 3. <u>Vent/Withdrawal Well Construction</u>

Vent/withdrawal wells will be constructed in the same manner as injection wells.

## 4. Witnessing

The MIT shall be witnessed by EPA personnel or their representatives. To arrange witnessing for these procedures, contact Mr. George Ford at (404) 562-9307. In lieu of witnessing well construction, permittee shall submit in a notarized document detailing the construction of all injection wells. Documentation shall be submitted to EPA thirty (30) days following completion of injection well construction.

#### 5. <u>Commencing Injection</u>

Any well authorized by this permit may not commence injection until:

- (a) Construction is completed and the permittee has submitted to the Director, by certified mail with return receipt requested, a notice of completion using EPA Form 7520-10, and either:
  - (i) The Director has inspected or otherwise reviewed the injection well and finds it is in compliance with the conditions of the permit; or,

- (ii) The permittee has not received within thirteen (13) days of the date of the Director's receipt of the notice required above, notice from the Director of his or her intent to inspect, or otherwise review the new injection well, in which case prior inspection or review is waived and the permittee may commence injection.
- (b) Permittee has sampled and analyzed the injectate for antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, manganese, mercury, selenium and thallium.
- (c) Permittee has sent analysis results of the above to EPA, and has received approval from EPA for injection based on analysis for these metals.
- (d) Permittee has conducted and passed a MIT.
- (e) Permittee has posted acceptable financial responsibility with EPA to plug and abandon the injection system.
- (f) Permitte has completed the remediation of boreholes by the following schedule:
  - 1. Prior to injecting into well number six (6), permittee shall remediate all drilled holes found in slurry area. Remediation procedures are found in Part III.

## SECTION C. OPERATING REQUIREMENTS

## 1. <u>Injection Operation</u>

Beginning on the effective date and lasting through the term of this permit, the permittee is authorized to inject only a slurry of recycled fluids, make up water, and a mixture of fine grained reject solids (coal, rock, clay particles, pyrite fines) from the processing of raw coal at the River View fine coal recovery plant under the conditions below.

Coal combustion ash (fly ash) is specifically prohibited from being slurried and injected.

#### (a) Injection Zone

Injection shall be limited to the abandoned works of the KY No. 11 Coal Seam in the Ohio #11 Mine.

#### (b) <u>Injection Operation</u>

The coal slurry will be prepared at the River View fine coal recovery plant and transported to an injection well by an abrasion resistant piping system. The slurry will be pumped to the injection well during injection operations at 2,100 gallons per minute. The injection slurry will be injected by gravity into the slurry area defined on map Attachment A. Slurry water will be allowed to settle out of the slurry mixture and removed from the slurry area by the vent/water withdrawal well. The withdrawn slurry water will be discharged into a creek under KPDES permit number 001970. Slurry injection will proceed for several cycles until the slurry area is filled with fines. After the slurry area is filled with fines, the slurry injection operation will be discontinued and the well will be plugged and abandoned. The entire slurry area is below drainage of the creeks in the area.

## (c) <u>Maximum Contaminant Level (MCLs)</u>

The injectate shall not exceed any primary drinking water standard listed in 40 C.F.R. Part 141 or other health based limits.

## 2. Loss of Mechanical Integrity During Operations

The permittee shall cease injection if a loss of mechanical integrity, as defined at 40 C.F.R. §146.8, becomes evident during operations. Operation shall not resume until the permittee has complied with the provision of Part II, Section G of this permit regarding a mechanical integrity demonstration.

## 3. Loss of Injection Zone Integrity

The permittee shall cease injection if a loss of injection zone integrity becomes evident during operations. Injection operations shall not be resumed until EPA has reviewed the injection operation and the cause(s) for the loss of injection zone integrity. This includes loss of integrity at the north boundary fault.

#### SECTION D. MONITORING REQUIREMENTS

#### 1. Sampling and Analysis Methods

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used for the laboratory analysis of the physical and chemical characteristics as specified in Part I, Section D, Item 3(a). Test methods and procedures shall be as specified in 40 C.F.R. § 136.3 or in 40 C.F.R. Part 261, Appendix III. When the analytical method for a particular parameter is not specified in either 40 C.F.R. § 136.3 or in 40 C.F.R. Part 261, Appendix III, the permittee must obtain the Director's approval of the methods used to generate all monitoring data. Reports to be generated from monitoring data are specified in Part I, Section E.

#### 2. Injection Operation Monitoring

The permittee shall monitor the operation of the injection wells as follows:

Parameter	į.	Monitoring Frequency
Injection Pressure (psig) at Wellhead		Weekly
Flow Rate (1,000 gallons/day) of Injected Fluid		Weekly
Cumulative Volume (1,000 gallons) of Injected Fluid	1	Weekly

Observation and recording of injection pressure, flow rate, and cumulative volume shall be made over equal time intervals beginning on the date on which each well commences operation. Recordings shall be of representative values.

## 3. <u>Injection Fluid Analysis</u>

The permittee shall conduct an injection fluid analysis prior to injection and annually thereafter. An analysis will also be required whenever changes are made to the injection fluid. The analysis must include:

- (a) pH, specific gravity, total dissolved solids, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, selenium, and thallium.
- (b) A list of all chemicals and their composition used for new flocculation. These lists should indicate the brand name of the product and manufacturer.

#### 4. Other Tests

- (a) The permittee shall conduct additional analysis from fluid samples collected at five (5) monitoring stations, identified on EPA CLASS V SLURRY INJECTION PERMIT MAP as SIMW#1, SIMW#2, SIMW#3, SIMW#4, and SIMW#5. The first sample shall be three months after the effective date of this permit and every three months thereafter. These wells shall be analyzed for the same parameters as in Part 1, Section D, 3, (a) of this permit.
- (b) The permittee shall conduct additional analysis from fluid samples collected at seven (7) of the fifteen (15) water supply wells identified in the permit application as active water wells. The water wells selected for sampling should be representative of the area of review. The water wells shall be sampled for pH, acidity, alkalinity, specific conductivity, sulfate, and specific gravity.

## 5. Shutting Down Injection Operation

Permittee shall cease injection if any of the wells in Part I, Section D, 4, (a) or (b) exceed baseline levels. After shutting down injection operations, permittee will conduct a dye trace study to ascertain if the coal injection operations are impacting drinking water aquifers. If the injection operations are impacting drinking water aquifers in the area, injection operations can not proceed until the impact of the injection operation on the drinking water aquifers is corrected. Baseline levels will be determined by calculating an average from two analyses taken prior to injection. Drinking water aquifers are defined as containing less than 10,000 TDS and a flow of 1 gallon or more per minute for 24 hours.

## SECTION E. REPORTING REQUIREMENTS

## 1. Reports on Well Tests and Workovers

Within thirty (30) days after completion of the activity, the permittee shall report to the Director the results of any tests other than those specified in Part I, Section B, Item 2.

## 2. Reporting of Monitoring Results

Monitoring results, as specified in Part I, Section D, Items 4(a) and 4(b), shall be reported every three (3) months and must be postmarked by the 15<sup>th</sup> day following each calendar quarter (January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup>). Monitoring results, as

specified in Part I, Section D, Item 2, shall be reported on a yearly basis on EPA Form 7520-11 and must be postmarked by the 28<sup>th</sup> day of the effective anniversary date

Copies of the monitoring results and reports required by Part I, Section D, and all other reports required by Part II, shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency, Region 4
Director, Water Protection Division
Safe Drinking Water Branch
Ground Water & SDWA Enforcement Section
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

## 3. Reporting of New Wells Drilled Within the Area of Review (AOR)

Within ten (10) days after spud date, the permittee shall report to the Director by certified mail, return receipt requested, the construction plans for any new well within the AOR of the permitted facility that will penetrate the injection zone. The permittee shall provide information on proposed construction (including location and quantities of cement), location and depth. This requirement applies to any construction activity regardless of ownership of the well. If the construction of the new well will not protect underground sources of drinking water (USDWs) from contamination, the Director may terminate the permit under 40 C.F.R. § 144.40(a)(3), if he or she determines that continued injection may endanger human health or the environment.

## SECTION F. PLUGGING AND ABANDONMENT PLAN

Plugging and abandonment (P&A) of the permitted injection wells shall be in accordance with Part II, Section F of this permit and 40 C.F.R. § 146.10.

During the operating life of the wells, the injection facility may be screened for technologically enhanced naturally occurring radioactive material (NORM) by EPA or another party. If the permittee is notified by a party other than EPA, or becomes aware at any time that elevated levels of NORM have been detected at the injection facility, the permittee must notify EPA in writing of that fact no later than 45 days prior to the permittee's intent to P&A the well. EPA may require the permittee to revise the P&A plan to insure the safe disposal and proper management of elevated levels of NORM waste.

Plugging and abandonment (P&A) of the permitted injection and vent wells will be by placing a continuous column of cement from approximately ten (10) feet above the roof of the slurry area to three feet below existing surface inside the injector casing. After cement hardening, the casing

will be cut and removed three (3) feet below existing surface.

Plugging of the injection wells is estimated to cost \$ 2,300.00 per well and will require posting of a financial responsibility demonstration with EPA prior to injection.

#### Part III for EPA Permit KYV0051 (Remediation)

- 1. River View shall remediate the two lithological boreholes associated with the slurry area impacted by injection well number 6. The boreholes will be remediated by reopening the borehole to within 10 feet of the slurry area roof and placing a continuous column of Class A cement from 10 feet above the slurry roof to four feet below existing surface elevation. If the top of cement, after the cement has hardened has dropped. River View will bring the top of cement to four feet below existing surface elevation.
- 2. All remediation shall be witnessed by EPA personnel or its authorized representatives. If the permittee wishes it may submit copies of the drilling record and cement tickets in lieu of witnessing.

#### PUBLIC NOTICE

## U.S. Environmental Protection Agency

#### Region 4

Water Protection Division - Safe Drinking Water Branch

61 Forsyth Street, SW

Atlanta, Georgia 30303-8960

Public Notice No. KY10UIC034

November 30, 2010

# NOTICE OF PROPOSED ISSUANCE OF UNDERGROUND INJECTION CONTROL PERMIT MODIFICATION

The U.S. Environmental Protection Agency (EPA), Region 4, intends to modify a Underground Injection Control (UIC) permit under the authority of the Code of Federal Regulations at 40 CFR Parts 124, 144, 146, and 147 to

River View Coal, LLC 771 Corporate Drive, Suite 800 Lexington, Kentucky 40503 UIC Permit Application Number KYV0051

The proposed Class V injection well modification will authorize the construction, operation, plugging, and abandonment of six (6) Class V Coal Slurry Injection Wells in the abandoned areas of the Kentucky Number 11 Coal Seam in the River View Mining area in Union County, Kentucky. It will also authorize the expansion of the slurry area from the original 107.1 acres to 1602.1 acres. Latitude and Longitude for the center of project is:

Latitude 37° 43' 43.3044" Longitude 87° 56' 56.1100"

The proposed UIC permit was drafted in accordance with the provisions of the Safe Drinking Water Act, as amended (42 USC 300f et seq., commonly known as SDWA) and other lawful standards and regulations. The permit limitations and conditions are tentative and open to comment from the public. Persons wishing to comment upon or object to any aspects of the permit issuance are invited to submit same in writing within thirty (30) days of this notice to the U.S. Environmental Protection Agency, Water Protection Division, Safe Dinking Water Branch, Ground Water & SDWA Enforcement Section, 61 Forsyth Street, S.W., Atlanta, Georgia 30303-8960, ATTENTION: George Ford. The public notice number and the UIC permit number should be included in the first page of comments. All comments received during the public notice period will be made a part of the administrative record of this permit and will be available for public review.

All comments received within the thirty-day period will be considered in the formulation of the final determination regarding the permit issuance. Any interested person may, within the

thirty-day period, request a public hearing, as provided by 40 CFR § 124.12. Where there is a significant degree of public interest in the proposed permit issuance, the EPA Regional Administrator will hold a public hearing. Any request for a hearing must be in writing to the address given above and must state the nature of the issues proposed to be raised in the hearing.

After consideration of all timely written comments, the requirements and policies in the SDWA and appropriate regulations, and, if a hearing is held, after consideration of all comments, statements and data presented at the hearing, the EPA Regional Administrator or his designee will make final determinations regarding the permit issuance. If the final determinations are substantially unchanged from the tentative determinations outlined above, the EPA Regional Administrator or his designee will so notify all persons who submitted written comments or participated in the hearing, if any was held. If the final determinations are substantially changed, the EPA Regional Administrator or his designee will issue a public notice indicating the revised determinations.

Within thirty (30) days after the Regional Administrator serves notice of the above final permit decision, any person who filed comments or participated in the public hearing, if any, may petition the Environmental Appeals Board (EAB) to review the permit decision or any condition therein. Any person, who failed to file comments or failed to participate in the public hearing, if any, may petition for administrative review only to the extent of the changes from the draft to the final permit decision. Additional information regarding administrative review is available in 40 CFR § 124.19 or by contacting Wilda Cobb of the Office of Environmental Accountability at the above address or telephone number (404) 562-9530. Technical information regarding the permit review is available by contacting George Ford of the Ground Water and SDWA Enforcement Section at (404) 562-9307. A petition to the EAB under 40 CFR § 124.19 is a prerequisite to the seeking of judicial review of the final permit decision.

The administrative record, including application, statement of basis, draft permit, comments received, and additional information on hearing procedures is available by writing to EPA at the above address, or for review and copying at 61 Forsyth Street, 9th Floor, Atlanta, Georgia, 30303-8960, between the hours of 8:15 a.m. and 4:30 p.m., Monday through Friday. Copies will be provided at a cost of 20 cents per page.

Please bring the foregoing to the attention of anyone who may be interested in this matter.